

Date: Sun, 19 Jun 94 04:30:14 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #193
To: Ham-Ant

Ham-Ant Digest

Sun, 19 Jun 94

Volume 94 : Issue 193

Today's Topics:

antenna tower erection (2 msgs)

Best Mobile Auto-Tuner?

Patrick Hickey where are you?

Super Sensitive FSM Circuit Wanted (3 msgs)

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>

Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 17 Jun 94 18:14:20 GMT

From: utcsri!relay.cs.toronto.edu!smoke.cs.toronto.edu!cs.toronto.edu!

enenkel@uunet.uu.net

Subject: antenna tower erection

To: ham-ant@ucsd.edu

Can anyone tell me how one goes about erecting an antenna tower? The one I have in mind is made from 3 1-inch diameter vertical tubes in a triangular configuration with horizontal braces/steps every foot or so. It comes in 10-foot long sections, with the tops of one section fitting into the bottoms of the next. I would be using 4 sections, with a 10-foot mast on the top, and attaching it to my house for support about 20 feet up. According to the manufacturer, it doesn't need guy wires. Is it possible to erect one of these without having a crane to lift the sections? I thought of joining the sections on the ground, hinging it at the base, and then levering it up somehow (how?), but there many obstructions (large shrubs, outbuildings) on the ground. The only remaining way seems to be to install the first section, climb up it carrying the second, lift it up over your head while hanging on to the tower with your legs, and then putting it in place. (I

can think of more pleasant ways to commit suicide! :-) Is this really an easy problem, and I am just missing something??? Thanks, Robert Enenkel

Date: 19 Jun 1994 01:49:11 -0700
From: ihnp4.ucsd.edu!news.cerf.net!ccnet.com!ccnet.com!not-for-mail@network.ucsd.edu
Subject: antenna tower erection
To: ham-ant@ucsd.edu

Robert F. Enenkel (enenkel@cs.toronto.edu) wrote:

: Can anyone tell me how one goes about erecting an antenna tower? The one
: I have in mind is made from 3 1-inch diameter vertical tubes in a triangular
: configuration with horizontal braces/steps every foot or so. It comes in
: 10-foot long sections, with the tops of one section fitting into the bottoms
: of the next. I would be using 4 sections, with a 10-foot mast on the top,
: and attaching it to my house for support about 20 feet up. According to
: the manufacturer, it doesn't need guy wires. Is it possible to erect one
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: hanging on to the tower with your legs, and then putting it in place. (I
: can think of more pleasant ways to commit suicide! :-) Is this really an
: easy problem, and I am just missing something??? Thanks, Robert Enenkel

Some one in your area has a gin pole. This is a fifteen foot pipe with a pulley on the top and a clamp set on the bottom. The tower man clamps the gin pole to the outside of the tower. The ground crew hauls the tower section up and the tower man guides it into place and bolts the section. He then moves the gin pole up to top of the next section ready for the next lift. Hopefully the tower man has a safety belt. This is really an easy problem if one of your crew has done this before.

Bob

--
Bob Wilkins work bwilkins@cave.org
Berkeley, California home rwilkins@ccnet.com
94701-0710 play n6fri@n6eeg.#nocal.ca.usa.noam

Date: Sat, 18 Jun 1994 15:21:45 -0400
From: ftpbox!mothost!lmpsbbs!NewsWatcher!user@uunet.uu.net

Subject: Best Mobile Auto-Tuner?
To: ham-ant@ucsd.edu

In article <2tsu77\$kcv@chnews.intel.com>, cmoore@ilx018.intel.com (Cecil A. Moore -FT-~) wrote:

> I want to obtain an automatic antenna tuner for mobile work. Any
> recommendations?... comments?... experiences?
>
> thanks in advance, 73, KG7BK, CecilMoore@delphi.com

Motorola has several different models, depending on the frequency coverage (2-18 or 2-30 MHz) and the length of the connected element (8 ft whip up to 50 ft wire). They are made for military and commercial international applications. However, several of those models are designed for continuous duty at 1500W output for HF data system applications. At \$1700 to \$9500 they are probably out of your price range.

AES has been advertising a low power unit from SGC in their recent summer '94 catalog, as usual minus any meaningful technical specifications beyond "runs on 12VDC". It appears to be the unit SGC sells for marine whips at 125W output.

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Karl Beckman, P.E. < Genius may have its limitations, but >
Motorola LMPS- Analog Data < stupidity is not thus handicapped. >
 < - Elbert Hubbard >

The statements and opinions expressed here are not those of Motorola Inc.
Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

Date: 17 Jun 94 17:35:21 GMT
From: utcsri!relay.cs.toronto.edu!smoke.cs.toronto.edu!cs.toronto.edu!
enekel@uunet.uu.net
Subject: Patrick Hickey where are you?
To: ham-ant@ucsd.edu

Sorry to have to do this, but he's changed his address. If you're out there Patrick, could you please send me e-mail? Thanks, Robert Enekel

Date: Fri, 17 Jun 1994 19:11:19 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!sundog.tiac.net!
usenet.elf.com!rpi!psinntp!relay1!unislc!powell@network.ucsd.edu
Subject: Super Sensitive FSM Circuit Wanted
To: ham-ant@ucsd.edu

Dean Gelabert (dean@splinter.coe.neu.edu) wrote:

: Hi:
: Does anyone have a circuit for a super-sensitive Field Strength
: Meter? Something w/variable gain that can sniff RF for miles! Thanks in
: advance.

: -Dean

I have been playing with field strength meters for many years, and the most sensitive one that I have been able to get has a range of about 1000 feet. This range is made possible by putting a 20db amplifier as a front-end to a commercial field strength meter. The meter I use is the best and most sensitive one I have found. The meter comes from I.C. Engineering and is called the "DIGI.FIELD Field Strength Meter". There are two versions, one sensitive to 2 nanowatts, and one to, I think 50 nanowatts. I have the 2 nanowatt version. I do not remember the address of the company, but in the back of most ham publication magazines, there is an advertisement for the two meters. Of course, I recommend the most sensitive one. I use the meter for transmitter locating, and it works very well.

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/ _ / _ (o . o) > ^ <	I never met a cat I didn't like! N7KSK _ , , , ^ .. ^ , , , _ _	 	Frank PoWell powell@slc.unisys.com
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Date: 18 Jun 1994 17:01:23 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!gatech!asuvax!chnews!
cmoore@network.ucsd.edu
Subject: Super Sensitive FSM Circuit Wanted
To: ham-ant@ucsd.edu

Frank Powell (powell@unislc.slc.unisys.com) wrote:

: I have been playing with field strength meters for many years, and the most
: sensitive one that I have been able to get has a range of about 1000 feet.

Hi Frank, I have a very sensitive field strength meter in my truck that works from miles away. It's called an ICOM-725. :-)

73, KG7BK, OOTC, CecilMoore@delphi.com

Date: Sat, 18 Jun 1994 20:13:49 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!hp-pcd!hpcvsnz!tomb@network.ucsd.edu

Subject: Super Sensitive FSM Circuit Wanted
To: ham-ant@ucsd.edu

Frank Powell (powell@unislc.slc.unisys.com) wrote:
: Dean Gelabert (dean@splinter.coe.neu.edu) wrote:
: : Hi:
: : Does anyone have a circuit for a super-sensitive Field Strength
: : Meter? Something w/variable gain that can sniff RF for miles! Thanks in
: : advance.

: : -Dean

: I have been playing with field strength meters for many years, and the most
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: sensitive one I have found. The meter comes from I.C. Engineering and is
: called the "DIGI.FIELD Field Strength Meter". There are two versions, one
: sensitive to 2 nanowatts, and one to, I think 50 nanowatts. I have the 2

I built a FSM with about 2 nanowatt sensitivity, with a logarithmic panel
meter readout. Thought about putting an amp in front of it. BTW, 2
nanowatts is about .3 millivolts at 50 ohms. The difficulty I have, though,
is that in a fox hunt, I can seldom use the full sensitivity, because it's
not selective enough: far too often there are other transmitters in the
area that mess things up.

As Cecil Moore mentioned, a receiver can be a very sensitive FSM; the usual
difficulties are to get one well enough shielded that you can put attenuation
on the front end and have it meaningful, and to get a decent readout device
with enough resolution and appropriate response times.

73, Tom -- K7ITM

End of Ham-Ant Digest V94 #193
